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WORLD INFLATION

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World Inflation

Inflation seriously undermined the world economy in the first half of the 1970's. In the industrial areas of the world, consumer prices increased at a 5-percent annual rate in the 1971-72 period, and later accelerated even further, eventually rising by 13 percent in 1974. The price performance was even worse in developing countries, where the average rate of consumer-price inflation rose from 10 percent in 1971 to 30 percent in 1974. The severity of this problem, in both practical and analytical terms, thus has stimulated economists to make new efforts to link the two worlds of theory and policy—witness the articles in this issue. These papers are built around a common theme—the factors which have made the inflation worldwide in nature. Although providing no final answers, they highlight the crucial inflation issues and thereby help extend the current dialogue on one of the world's most intractable problems.

In the first article, Edward S. Shaw argues, "The inflation was a monetary phenomenon. Money was supplied in excessive quantities everywhere, and its value or purchasing power decayed." He formalizes his analysis with a model of world inflation, wherein government deficits of the reserve-center country (the U.S.) generate an excess supply of dollars, which under a system of fixed exchange rates then inflate the money supplies of other countries. The model is first used to explain the overall price stability of the 1958-65 period, and then to explain the collapse of the fixed-exchange-rate system in the following decade.

Shaw also notes the potential difficulties for price stability under the new regime of floating exchange rates. With no change in policies, the United States could release through its budget deficits the inflationary pressures that were previously absorbed, under Bretton Woods, by growth in worldwide demand for dollar reserves. He concludes that the result could be inflation at rates even faster than those recently experienced in this country.

Michael W. Keran highlights those elements in the current body of economic theory which might help explain the unusual combination of inflation and recession which now besets the world in general and the U.S. in particular. First, the inflation. An unprecedented expansion in international reserves—the dollar-overhang problem — occurred prior to the early-1973 breakdown of the system of fixed-exchange-rates. This led to a simultaneous increase in the domestic money stocks of most of the world's industrial nations, resulting in a massive worldwide boom and then a massive worldwide inflation. Yet because of the worldwide nature of this process, the magnitude of inflation in any one country was greater than it otherwise would have been—because in addition to the traditional impact of an expanding domestic money stock on domestic prices, there was also the impact of rest-of-the-world inflation on domestic prices through the mechanism of internationally-traded goods. On the basis of data for six industrial countries (including the U.S.) Keran presents evidence that the recent inflation phenomenon can only be explained by considering both international and domestic monetary de-

velopments.

Rest-of-the-world inflation also helps explain the recession phenomenon, operating through existing relationships between the domestic money stock and domestic income. Given the growth in the domestic nominal money stock, a larger - than - expected domestic inflation imported from outside will reduce *real* money balances by more than otherwise expected, and thus will temporarily reduce real income. With this unprecedented (if temporary) gap between real and nominal income, we experience simultaneous inflation and recession. "How long will this state of affairs continue? As long as the growth rates of real and nominal money are on divergent courses"—which depends today on the course of world inflation.

In another paper, Hang-sheng Cheng and Nicholas P. Sargen develop a monetarist model to examine the effectiveness of central-bank policy for combatting imported inflation. They note that the impact of imported inflation on domestic prices depends critically on the degree of openness of the economy, which in turn is determined by the substitutability between domestic products and foreign products on the one hand, and the ratio of imports to domestic expenditures on the other. Depending on the degree of openness, the central bank can exert at least partial control over the domestic money supply. Even in the case of a highly open economy, domestic credit expansion or contraction will affect the domestic money supply, as a result of induced changes in the domestic demand for money which are brought about by changes in real expenditures and domestic prices. Hence, the central bank could, under specified circumstances, utilize domestic credit policy for combatting imported inflation.

Cheng and Sargen test their model by analyzing 1948-73 data for eight Pacific Basin countries with varying degrees of dependence on trade, levels of development, and rates of inflation. The results suggest that imported inflation contributed significantly to domestic inflation in nearly all of the countries in the sample, with the impact more apparent in developed countries than in the developing countries of the region. At the same time, independent monetary policy appears to have been less feasible for the developed countries than for the developing countries.

Joseph Bisignano in his contribution emphasizes the increasing monetary interdependence among nations. First, a high degree of correlation exists among short-term interest rates of various countries, reflecting the rapid rise and integration of capital and money markets. In addition, changes in the U.S. monetary base significantly influence the money supplies of almost all major industrial countries. This finding appears logical, given the acceleration in the rate of growth of the U.S. monetary base, and given the commitment by most nations (until recently) to a system of fixed exchange rates.

Bisignano then proceeds to develop a monetary interpretation of the balance of payments. This approach requires a money-demand equation, a money-supply equation, an equation positing the equality of those two variables, and an equation defining the balance of payments as the change in the foreign-asset component of the monetary base. This monetary approach is essentially a theory of equilibrium restoration between money demand and supply in open economies. The analysis hinges crucially on the empirical stability of monetary-base demand, which was statistically verifiable over the 1966-73 period.